



DEPARTMENT OF THE NAVY
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IN REPLY REFER TO
BUMEDNOTE 6000
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BUMED NOTICE 6000

From: Chief, Bureau of Medicine and Surgery
To: Holders of the Manual of the Medical Department

Subj: CHANGE TO MANUAL OF THE MEDICAL DEPARTMENT (MANMED),
ARTICLE 15-40(1)(K), COLOR PERCEPTION TESTING

Ref: (a) MANMED article 15-40(1)(k)

Encl: (1) Reprinted page 15-21 and revised page 15-22

1. Purpose. To update color perception testing.
2. Action. To update reference (a), remove page 15-22 and replace with enclosure (1).
3. Cancellation Contingency. Retain until incorporated into reference (a).


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Available at:
<http://navymedicine.med.navy.mil/instructions/external/external.htm>

(1) Conjunctivitis, chronic, including vernal and trachoma. Individuals with acute conjunctivitis are unacceptable until the condition is cured.

(2) **Pterygium:**

(a) Pterygium recurring after two operative procedures. Evaluation will be performed no earlier than 3 months after surgical removal.

(b) Pterygium encroaching on the cornea in excess of 3 millimeters or interfering with vision.

(c) **Cornea**

(1) Dystrophy, corneal, of any type including keratoconus of any degree.

(2) Keratitis, acute or chronic.

(3) Ulcer, corneal; history of recurrent ulcers or corneal abrasion (including herpetic ulcers).

(4) Vascularization or opacification of the cornea from any cause which is progressive or reduces vision below the standards prescribed.

(5) Any history of corneal surgery including but not limited to radial keratotomy, keratomileusis, or epikeratophakia.

(6) Orthokeratology within 3 months of evaluation. Sufficient observation to ensure that no contact lenses have been worn immediately prior to examination is required.

(d) **Uveal Tract.** Inflammation of the uveal tract, acute, chronic, recurrent, or a history thereof except healed traumatic choroiditis.

(e) **Retina**

(1) Angiomas, phakomas, retinal cysts, and other congenito-hereditary conditions that impair visual function.

(2) Degenerations of the retina to include macular cysts, holes, and other degenerations (hereditary or acquired degenerative changes) and other conditions affecting the macula. All types of pigmentary degenerations (primary and secondary).

(3) Detachment or tear of the retina or history of surgery for same except in cases of repair of documented minor traumatic retinal detachment.

(4) Inflammation of the retina (retinitis or other inflammatory conditions of the retina to include Coat's disease, diabetic retinopathy, Eales' disease, and retinitis proliferans).

(5) Chorioretinitis, unless a single episode which has healed and does not interfere with vision.

(f) **Optic Nerve**

(1) Congenito-hereditary conditions of the optic nerve or any other central nervous system pathology affecting the efficient function of the optic nerve.

(2) Optic neuritis, neuroretinitis, or secondary optic atrophy resulting therefrom or documented history of attacks of retrobulbar neuritis.

(4) Papilledema.

(g) **Lens**

(1) Aphakia (unilateral or bilateral) intraocular lens implants may be waivable if 1 year has elapsed since surgery.

(2) Dislocation, partial or complete, of a lens

(3) Opacities of the lens which interfere with vision or which are considered to be progressive.

(4) Pseudophakia (unilateral or bilateral).

(h) **Ocular Mobility and Motility**

(1) Diplopia, documented, constant or intermittent, from any cause or of any degree interfering with visual function.

(2) Nystagmus, with both eyes fixing, congenital or acquired.

(3) Strabismus of 40 prism diopters or more, uncorrectable by lens to less than 40 diopters.

(4) Strabismus of any degree accompanied by documented diplopia.

(5) Strabismus, surgery for the correction of, within the preceding 6 months.

(i) **Miscellaneous Defects and Diseases**

(1) Abnormal conditions of the eye or visual fields due to diseases of the central nervous system. Meridian specific visual field minimums are:

(a) Temporal: 85 degrees.

(b) Superior temporal: 55 degrees.

(c) Superior: 45 degrees.

(d) Superior nasal: 55 degrees.

(e) Nasal: 60 degrees.

(f) Inferior nasal: 50 degrees.

(g) Inferior: 65 degrees.

(h) Inferior temporal: 85 degrees.

(2) Absence of an eye.

(3) Asthenopia severe.

(4) Exophthalmos, unilateral or bilateral.

(5) Glaucoma, primary or secondary or preglaucoma as evidenced by IOP greater than 20 mm Hg.

(6) Hemianopsia of any type.

(7) Loss of normal pupillary reflex reactions to light or accommodation to distance or Adies syndrome.

(8) Loss of visual fields from any cause.

(9) Night blindness.

(10) Residuals of old contusions, lacerations, penetrations, etc., which impair visual function required for satisfactory performance of military duty.

(11) Retained intraocular foreign body.

(12) Tumors.

(13) Any organic disease of the eye or adnexa not specified above which threaten continuity of vision or impairment of visual function.

(j) Visual Acuity

(1) Distant visual acuity of any degree that does not correct with spectacle lenses to at least one of the following:

- (a) 20/40 in one eye and 20/70 in the other.
- (b) 20/30 in one eye and 20/100 in the other.
- (c) 20/20 in one eye and 20/400 in the other.
- (d) Commissioning in the unrestricted line requires correction to 20/20.

(2) Refractive Error

(a) Enlistment. Any degree of error in spherical equivalent of over ± 8.00 diopters; or if ordinary spectacles cause discomfort by reason of ghost images, prismatic displacement, or unstable refractive error.

(b) Applicants for training programs leading to commission in the unrestricted line (URL) requires correction to 20/20 in each eye and maximum refractive error in any meridian cannot exceed ± 6.00 diopters (± 7.00 diopters for restricted line (RL) or staff corps (SC)). Individuals with vision that does not correct to 20/20 will be considered for a waiver based on program applied for.

(c) Applicants to the Merchant Marine Academy, appointment in the Merchant Marine Reserve, U.S. Naval Reserve, Merchant Marine Program must have uncorrected vision no worse than 20/200 in both eyes correctable to 20/20.

(d) Commissioning URL maximum refractive error in any meridian cannot exceed ± 8.00 diopters (± 9.00 diopters for RL or SC). See note below.

(e) All commissioning programs. In addition to the limitations listed above, the difference in the refractive error in any meridian of the two eyes (anisometropia) may not exceed ± 3.50 diopters. Cylinder correction may not exceed ± 3.00 diopters.

(3) Near Visual Acuity. Any degree which does not correct to at least 20/60 in the better eye.

(4) Contact Lens. Complicated cases requiring contact lens for adequate correction of vision such as keratoconus, corneal scars, and irregular astigmatism.

Note. Refractive error in any meridian. When the signs of the sphere and cylinder (+/-) are alike, the refractive error in any meridian is the algebraic sum of the two values. When the signs are not alike, the refractive error in any meridian is the higher absolute value of the two (usually the sphere).

(k) Color Perception. Color perception will be tested by PIP with 12/14 constituting a pass. If the applicant fails the PIP, a repeat test with the FALANT will be conducted with a passing score of 9/9. If one error is made on the first FALANT examination, a repeat examination is performed with 16/18 correct responses considered passing. Normal (passing score) color vision is required for: URL; RL with 163x designator; limited duty officer (LDO) with designators of 611x/621x, 612x/622x, 616x/626x or 648x; warrant officer with designators of 711x/721x, 712x/722x, 717x/727x or 748x; and other special duties listed in this chapter.

15-41 Lungs and Chest Wall (Except Tuberculosis)

(1) The causes for rejection are:

(a) Abnormal elevation of the diaphragm on either side

(b) Asthma, reactive airway disease, exercise induced bronchospasm except for childhood asthma with a reliable history of freedom from symptoms since the 12th birthday, or use of bronchodilators or other asthma-type medications.

(c) Acute infectious processes of the lung, chest wall, mediastinum, or pleura, until cured.

(d) Foreign body in trachea or bronchus.

(e) Foreign body of the chest wall causing symptoms.

(f) Lobectomy, history of, for a nontuberculous, nonmalignant lesion with residual pulmonary disease. Removal of more than one lobe is cause for rejection regardless of the absence of residuals.

(g) Other symptomatic traumatic lesions of the chest or its contents.

(h) Pneumothorax or history thereof within 1 year of date of examination if due to simple trauma or surgery; within 3 years of date of examination if of spontaneous origin. Surgical correction is acceptable if no significant residual disease or deformity remains and pulmonary function tests are within normal limits.

(i) Acute mastitis, chronic cystic mastitis, if more than mild.

(j) Bronchiectasis.

(k) Bronchitis, chronic with evidence of pulmonary function disturbance.

(l) Bronchopleural fistula.

(m) Bullous or generalized pulmonary emphysema.

(n) Chronic abscess of lung.

(o) Chronic fibrous pleuritis of sufficient extent to interfere with pulmonary function or obscure the lung field in the chest x-ray.

(p) Chronic mycotic diseases of the lung including coccidioidomycosis; residual cavitation or more than a few small sized inactive and stable residual nodules demonstrated to be due to mycotic disease.

(q) Empyema, residual sacculation or unhealed sinuses of chest wall following operation for empyema.

(r) Extensive pulmonary fibrosis from any cause, producing dyspnea on exertion.

(s) Foreign body of the lung or mediastinum causing symptoms or active inflammatory reaction.

(t) Multiple cystic disease of the lung or solitary cyst which is large and incapacitating.